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AMENDMENTS TO THE CLAIMS

- 1. (cancelled).
- 2. (previously presented) The system of claim 31, wherein the first sensor comprises an NMR sensor.
- 3. (currently amended) The system of claim 32, wherein the non rotating stabilizer is adjustable, and further comprising a second sensor for detecting motion of the drilling tubular proximate the first sensor, a diameter of the non-rotating stabilizer being adjusted in response to the detection of motion by the second sensor.
- 4. (original) The system of claim 3, wherein the second sensor comprises an accelerometer.
- 5. (original) The system of claim 3, wherein the second sensor comprises three mutually orthogonal accelerometers.
- 6. (previously presented) The system of claim 31, wherein the wellbore comprises a deviated wellbore.
- 7. (currently amended) The system of claim 31 32, wherein the non-rotating stabilizer comprises:
 - i. a housing attached to said drilling tubular;
 - ii. ___a sleeve substantially surrounding at least a portion of said housing;
 - iii. a bearing acting cooperatively with said sleeve and said housing for allowing relative motion between the sleeve and the housing; and

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- iv. a rib attached to said housing, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level.
- 8. (previously presented) The system of claim 32, wherein the predetermined level is 2.0 millimeter.
- 9. (original) The system of claim 7, wherein the rib is a straight rib.
- 10. (original) The system of claim 7, wherein the rib is a spiral rib.
- 11. (currently amended) The system of claim 7, <u>further comprising a second</u>
 <u>stabilizer having at least one wherein the rib is an</u> adjustable rib, said
 adjustable rib adapted to be controllably extended to contact a wellbore wall.
- 12. (previously presented) The system of claim 7, A system for controlling sensor motion while measuring a parameter of interest in a wellbore formed in an earthen formation, comprising:
 - (a) a drilling tubular conveyed into the wellbore, said drilling tubular having at least one vibrational node;
 - (b) a first sensor positioned along the drilling tubular at the at least one vibrational node, the first sensor measuring the parameter of interest;
 - a non-rotating stabilizer forming the vibrational node, the non-rotating stabilizer having a sleeve rotatably coupled to the drilling tubular and at least one wherein the rib is an adjustable rib adapted to be controllably extended to contact a wellbore wall; and further comprising
 - (d) a downhole controller and a second sensor for detecting motion of the drilling tubular proximate the first sensor, said controller controlling the

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adjustable rib to reduce motion detected by said second sensor below a predetermined level.

- 13. (currently amended) The system of claim 7, wherein the housing is adapted to displace the center of the non-rotating stabilizer relative to a longitudinal axis of the drilling tubular.
- 14. (previously presented) The system of claim 31, further comprising two non-rotating stabilizers cooperating to form the vibrational node, with one non-rotating stabilizer being deployed on each side of said first sensor.
- 15. (previously presented) The system of claim 31, wherein the first sensor comprises at least one of (i) a density sensor and (ii) a porosity sensor.
- 16. (cancelled)
- 17. (previously presented) The method of claim 34, wherein the first sensor comprises an NMR sensor.
- 18. (currently amended) The method of claim 35, further comprising using a second sensor disposed in said drilling tubular for detecting motion of the drilling tubular proximate the first sensor; and adjusting a diameter of the non-retating stabilizer in response to the detection of motion by the second censor.
- 19. (original) The method of claim 18, wherein the second sensor comprises an accelerometer.
- 20. (original) The method of claim 18, wherein the second sensor comprises three mutually orthogonal accelerometers.

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- 21. (original) The method of claim 16, wherein the wellbore comprises a deviated wellbore.
- 22. (previously presented) The method of claim 35, wherein the non-rotating stabilizer comprises:
 - in a housing adapted to attach to said drilling tubulary
 - ii. the sleeve substantially surrounding at least a portion of said housing; and
 - a bearing acting cooperatively with said sleeve and said housing for allowing relative motion between the sleeve and the housing; and
 - iv. a rib attached to said housing, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level.
- 23. (previously presented) The system of claim 35, wherein the predetermined level is 2.0 millimeter.
- 24. (original) The method of claim 22, wherein the rib is a straight rib.
- 25. (original) The method of claim 22, wherein the rib is a spiral rib.
- 26. (currently amended) The method of claim 22, <u>further comprising a second</u>

 <u>stabilizer having at least one</u> wherein the rib is an adjustable rib, said

 adjustable rib adapted to be controllably extended to contact a borehole wall.
- 27. (currently amended) The method of claim 22, wherein the housing is adapted to displace the center of the non rotating stabilizer relative to a longitudinal axis of the drilling tubular.

- 28. (currently amended) The method of claim 35, <u>further comprising</u> wherein the non-rotating stabilizer comprises two non-rotating stabilizers cooperating to form the vibrational node, with one non-rotating stabilizer being deployed on each side of said first sensor.
- 29. (previously presented) The method of claim 34 wherein the first sensor comprises at least one of (i) a density sensor and (ii) a porosity sensor.
- 30. (previously presented) The method of claim-22, A method for controlling sensor motion during a measurement, comprising:
 - a. conveying a drilling tubular in a wellbore to a downhole location;
 - b. forming a vibrational node in the drilling tubular using a stabilizer having at least one rib attached to a sleeve rotatably mounted to the drilling tubular; and
 - c. disposing a first sensor at the vibrational node, said first sensor measuring a formation parameter of interest, wherein the at least one rib is an adjustable rib adapted to be controllably extended to contact a borehole wall and further comprising a downhole controller and a second sensor for detecting motion of the drilling tubular proximate the first sensor, said controller controlling the adjustable rib to reduce motion detected by said second sensor below a predetermined level.
- 31. (currently amended) A system for controlling sensor motion while measuring a parameter of interest in a wellbore formed in an earthen formation, comprising:
 - (a) a drilling tubular conveyed into the wellbore, said drilling tubular having at least one vibrational node;
 - (b) a stabilizer forming the at least one vibrational node and including:

 (i) a housing adapted to attach to said drilling tubular;

- (iii) a non-adjustable rib attached to said sleeve, said rib extending radially outward from the housing to reduce motion of said first sensor below a predetermined level; and
- (c) (b) a first sensor positioned along the drilling tubular at the at least one vibrational node, the first sensor measuring the parameter of interest.
- 32. (cancelled)
- 33. (previously presented) A system of claim 31 wherein the at least one vibrational node has been analytically predicted.
- 34. (currently amended) A method for controlling sensor motion during a measurement, comprising:
 - a. conveying a drilling tubular in a wellbore to a downhole location;
 - b. forming a vibrational node in the drilling tubular <u>using a stabilizer</u> having one or more non-adjustable ribs attached to a sleeve rotatably mounted to the drilling tubular; and
 - c. disposing a first sensor at the vibrational node, said first sensor measuring a formation parameter of interest.
- 35. (currently amended) The method of claim 34, wherein a non-rotating the stabilizer forms the vibrational node by reducing motion of said first sensor below a predetermined level during said measurement.
- 36. (previously presented) A method of claim 34 wherein the at least one vibrational node has been analytically predicted.